



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/649,158 | 08/27/2003 | Naoya Haneda | 450100-04720 | 4995 |

7590 03/31/2008
FROMMER LAWRENCE & HAUG LLP
745 FIFTH AVENUE
NEW YORK, NY 10151

| |
|----------|
| EXAMINER |
|----------|

WYSZYNSKI, AUBREY H

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2134

| | |
|-----------|---------------|
| MAIL DATE | DELIVERY MODE |
|-----------|---------------|

03/31/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--|--------------------------------------|--|
| Office Action Summary | Application No. 10/649,158 | Applicant(s) HANEDA ET AL. | |
| | Examiner AUBREY H. WYSZYNSKI | Art Unit 2134 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-40 are pending.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 18-19 and 39-40 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

- a. Claims 18 and 39 are directed towards an information processing apparatus that does not contain any elements of hardware. One of ordinary skill could broadly interpret the claims to be entirely implemented in software per se which are not tangibly embodied through the use of hardware or a computer readable medium.
- b. Claims 19 and 40 are directed towards a program which is not tangibly embodied on a computer readable medium. Therefore, claim 19 is directed towards non-statutory subject matter.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 26 recites the limitation "fourth data". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsutsui et al., US 2001/0028317.

Regarding claim 1, Tsutsui discloses an information processing method for an information processing apparatus receiving a supply of a second data stream generated on the basis of a first data stream and processing the second data stream, comprising:

a generation step of generating a third data stream (synthetic code string, fig. 1, #156 and ¶[0078]) from the second data stream (second codec encoder output, fig. 1, #154) on the basis of a predetermined condition (¶[0078] "a code string generator 155 to generate a synthetic code string by combining outputs from the above components in an encoding frame having a predetermined length being a unit of encoding"); and a first control step of controlling playback or recording of the third data stream (fig. 18), wherein the second data stream has an arrangement that cannot be played or recorded without changing the arrangement (fig. 1, #154, second codec encoder, output cannot be played until the synthetic code string is generated ¶[0077-0078]), and wherein the third data stream (synthetic code string) is generated in the generation step by rearranging, on the basis of the predetermined condition, the second data stream so that part or the entirety of the second data stream is playable or recordable (¶[0080] "The second codec encode block 154 encodes a PCM input signal of a music piece by the second codec, and sends it to the code string generator 155. The code string generator 155 combines the warning message, silent fixed pattern and second codec-encoded data for each encoding frame to generate a synthetic code string.").

Regarding claim 2, Tsutsui discloses an information processing method according to claim 1, wherein the predetermined condition includes a condition concerning the play time or the recording time controlled in the first control step, the upper limit of the play time or the recording time controlled in the first control step, and/or information concerning the start position of playback or recording controlled in the first control step

(¶[0078] “to generate a synthetic code string by combining outputs from the above components in an encoding frame having a predetermined length being a unit of encoding.”).

Regarding claim 3, Tsutsui discloses an information processing method according to claim 1, wherein, in the generation step, the third data stream is generated so that playback or recording of an arbitrary portion of the third data stream is controlled in the first control step (fig. 1, #150 controller, controls the encoder components).

Regarding claim 4, Tsutsui discloses an information processing method according to claim 1, wherein the second data stream includes a plurality of frames, the plurality of frames including a first frame type that has a data arrangement in which data cannot be played or recorded without changing the arrangement, wherein, in the generation step, a second frame type is selected from the first frame type of the second data stream, and data in the second frame type is rearranged so that the data in the second frame type becomes playable or recordable (¶[0080] “The encoder builds a music piece from a warning message part and music piece part, each formed from a plurality of the above encoding frames...”).

Regarding claims 5-6, Tsutsui discloses an information processing method according to claim 4, wherein the predetermined condition includes the upper limit of the play time or the recording time controlled in the first control step, and wherein, in the generation

step, a plurality of frames of the second frame type, which are playable or recordable within the play time or the recording time, are selected from the first frame type included in the second data stream on the basis of the predetermined condition, and data in the selected frames is rearranged ([0085] “The input signal is transformed to 64 spectrum signals each for a predetermined time block (encoding frame).”).

Regarding claim 7, Tsutsui discloses an information processing method according to claim 1, further comprising: a storage control step of controlling storage of information indicating the predetermined condition; and/or an obtaining control step of controlling the obtaining of the information indicating the predetermined condition from the second data stream (fig. 23, #24, “The memory 24 is used as a buffer memory to and from which data write and read are controlled by the system controller 17”).

Regarding claim 8, Tsutsui discloses an information processing method according to claim 1, further comprising; an obtaining control step of controlling the obtaining of a fourth data stream-including information required to recover the first data stream from the second data stream; a recovering step of recovering the first data stream from the second data stream on the basis of the fourth data stream, the obtaining of which is controlled in the obtaining control step; and a second control step of controlling playback or recording of the first data stream recovered in the recovering step (combining first and second code strings, paragraph [0029], page 2, lines 2-3 using said third data stream synthetic code string, paragraph [0029], page 2, line 1).

Regarding claim 9, Tsutsui discloses an information processing method according to claim 8, wherein the fourth data stream, the obtaining of which is controlled in the obtaining control step, includes first data required to recover the first data stream, and wherein, in the recovering step, the first data stream is recovered by replacing part of the first data included in the fourth data stream with second data included in the second data stream (generating synthetic code string from the first and second strings of the silent signal and input signal, paragraphs [0027] and [0029], pages 2, lines 3 and 1-2 respectively).

Regarding claim, Tsutsui discloses an information processing method according to claim 9, wherein the second data is written in the second data stream at a position not referred to when the third data stream is generated from the second data stream in the generation step and when playback or recording of the third data stream is controlled in the first control step (Fig. 18, first codec part of a silent fixed pattern decoded (substituted) and output second codec based data).

Regarding claim 11, Tsutsui discloses an information processing method according to claim 9, wherein the second data stream is an encoded data stream, and wherein the first data includes a variable-length code (Fig. 6, first coding to raise the frequency resolution of a variable length code in the encoding frames, F0, F1, paragraph [0093], page 6, lines 21-24).

Regarding claim 12, Tsutsui discloses an information processing method according to claim 9, further comprising an inverse-transformation step of inverse-transforming frequency components, wherein the second data stream is a data stream generated by being transformed into frequency components and then being encoded (Fig. 1, first encoding step for encoding a silent signal, paragraph [0031], page 3, lines 1-3), and wherein the first data includes spectral coefficient information (Fig. 2, signal transformed to signal frequency components, paragraph [0082], page 4, lines 3-5).

Regarding claim 13, Tsutsui discloses an information processing method according to claim 9, further comprising a decoding step of decoding the second data stream, wherein, when the second data is decoded in the decoding step, the data length of the decoded second data is shorter than the data length of the decoded first data (Fig. 19, signal component decoder 62), method (Fig. 19) and program (Fig. 19, code string provided at input terminal 60 to a code string decomposer 61 to signal component decoder 62 for restoring the signal component, paragraph [0106], page 7, lines 4-8).

Regarding claim 14, Tsutsui discloses an information processing method according to claim 9, wherein the second data stream is an encoded data stream, and the first data includes the number of quantization units (fig. 6, quantizing precision data 83), and/or wherein the second data stream is a data stream generated by being separated into first signals and second signals and then being encoded, and the first data includes the

number of separated first signals (fig. 1, #151, 152, 154).

Regarding claims 15-16, Tsutsui discloses an information processing method wherein the second data stream is an encoded data stream, and the data included in the fourth data stream is normalization coefficient information (fig. 6, normalization coefficient data 84), and/or wherein the second data stream is an encoded data stream (fig. 1, #154), and the data included in the fourth data stream is quantization accuracy information (fig. 6, quantizing precision data 83).

Regarding claim 17, Tsutsui discloses an information processing method according to claim 1, further comprising a decoding step of decoding the third data stream, wherein, in the first control step, playback or recording of the third data stream decoded in the decoding step is controlled (fig. 24, #300), and wherein the second data stream is an encoded data stream (fig. 1, #154, second codec encoder).

Regarding claims 18, Tsutsui discloses an information processing apparatus receiving a supply of a second data stream (fig. 1, #154, second code encoder output) generated on the basis of a first data stream and processing the second data stream, comprising: generation means for generating a third data stream from the second data stream on the basis of a predetermined condition (generating synthetic code string from the first and second strings of the silent signal and input signal, paragraphs [0027] and [0029], pages 2, lines 3 and 1-2 respectively); and control means for controlling playback or

recording of the third data stream (fig. 24, #300).

As per claim 19, this is a program version of the claimed apparatus discussed above in claim 18 wherein all claimed limitations have also been addressed and/or cited as set forth above.

Regarding claims 20-22, 26 34-35, Tsutsui discloses an information processing method for an information processing apparatus transforming a first data stream into a second data stream, comprising: a first replacement step of replacing first data included in the first data stream with second data to generate a third data stream (generating synthetic code string from the first and second strings of the silent signal and input signal, paragraphs [0027] and [0029], pages 2, lines 3 and 1-2 respectively); a changing step of changing the arrangement of third data included in the third data stream generated in the first replacement step (generating synthetic code string from the first and second strings of the silent signal and input signal, paragraphs [0027] and [0029], pages 2, lines 3 and 1-2 respectively); an insertion step of inserting information indicating a condition for playback or recording of the second data stream into the third data stream in which the arrangement of the third data is changed in the changing step (combinin first and second code strings, paragraph [0029], page 2, lines 2-3 using said third data stream synthetic code string, paragraph [0029], page 2, line 1); and a first generation step of generating the second data stream on the basis of the third data stream including the information indicating the condition, the information being inserted

in the insertion step, wherein, in the changing step, the third data recorded in a first area of the third data stream is moved to a second area (generating synthetic code string from the first and second strings of the silent signal and input signal, paragraphs [0027] and [0029], pages 2, lines 3 and 1-2 respectively).

Regarding claim 23, Tsutsui discloses an information processing method according to claim 22, wherein the first data is data concerning the number of pieces of information referred to during playback or recording of the second data stream, and wherein, in the first replacement step, the first data is replaced with the second data indicating that there is no information referred to during playback or recording of the second data stream (generating synthetic code string from the first and second strings of the silent signal and input signal, paragraphs [0027] and [0029], pages 2, lines 3 and 1-2 respectively).

Regarding claim 24, Tsutsui discloses an information processing method according to claim 20, wherein the first data stream, the second data stream, and the third data stream each include a plurality of frames, wherein, in the insertion step, the information indicating the condition is inserted into at least one of the plurality of frames of the third data stream, and wherein the frames included in the second data stream generated in the first generation step include information indicating whether or not the information indicating the condition is inserted in the insertion step (generating synthetic code string from the first and second strings of the silent signal and input signal, paragraphs [0027]

and [0029], pages 2, lines 3 and 1-2 respectively).

Regarding claim 25, Tsutsui discloses an information processing method according to claim 20, wherein the information indicating the condition, which is inserted into the third data stream in the insertion step, includes a condition concerning the play time or the recording time when playing or recording the second data stream and/or information concerning the start position of playback or recording when playing or recording the second data stream (fig. 24, #300).

Regarding claim 27, Tsutsui discloses an information processing method according to claim 26, further comprising an encoding step of encoding input data, wherein the fourth data includes normalization coefficient information (fig. 6, normalization coefficient data 84) on the encoding in the encoding step and/or quantization accuracy information on the encoding in the encoding step (fig. 6, quantizing precision data 83).

Regarding claim 28, Tsutsui discloses an information processing method according to claim 20, further comprising a second generation step of generating a fourth data stream required to recover the first data stream from the second data stream generated in the first generation step, wherein the fourth data stream generated in the second generation step includes the first data replaced with the second data in the first replacement step (combining first and second code strings, paragraph [0029], page 2, lines 2-3 using said third data stream synthetic code string, paragraph [0029], page 2,

line 1).

Regarding claim 29, Tsutsui discloses an information processing method according to claim 28, further comprising a separation step of separating fourth data from the first data stream, the fourth data differing from the first data and the third data, wherein the fourth data stream generated in the second generation step further includes the fourth data separated in the separation step ([0091 “The tone component separator 91 separates the transformed output of the transformer 41 into a tone component and non-tone component and supplies them to a tone component encode block 92 and non-tone component encode block 93, respectively”).

Regarding claim 30, Tsutsui discloses an information processing method according to claim 20, further comprising an encoding step of encoding input data, wherein, in the first replacement step, encoded data encoded in the encoding step serves as the first data stream, and the first data included in the first data stream is replaced with the second data (generating synthetic code string from the first and second strings of the silent signal and input signal, paragraphs [0027] and [0029], pages 2, lines 3 and 1-2 respectively)..

Regarding claim 31, Tsutsui discloses an information processing method according to claim 30, wherein the first data includes information indicating the number of quantization units in the encoding in the encoding step step (fig. 6, quantizing precision

data 83).

Regarding claim 32-33, Tsutsui discloses an information processing method according to claim 30, further comprising: a frequency component transformation step of transforming input data into frequency components; and a separation step of separating the frequency components generated by transformation in the frequency component transformation step into first signals including tone components and second signals other than the first signals, wherein, in the encoding step, different encoding processes are performed on the first signals and the second signals ([0091] “The tone component encode block 92 and non-tone component encode block 93 are constructed similarly to the encode block shown in FIG. 4 and encode the tone component and non-tone component, respectively. The tone component encode block 92 encodes position data of the tone component as well.”).

Regarding claim 36, Tsutsui discloses an information processing method according to claim 34, further comprising a second generation step of generating a fourth data stream required to recover the first data stream from the second data stream generated in the first generation step, wherein the fourth data stream generated in the second generation step includes the fourth data replaced with the fifth data in the second replacement step and position information indicating the position of the fourth data in the first data stream (combining first and second code strings, paragraph [0029], page 2, lines 2-3 using said third data stream synthetic code string, paragraph [0029], page 2,

line 1).

Regarding claim 37, Tsutsui discloses an information processing method according to claim 34, further comprising an encoding step of encoding data, wherein, when the fifth data is decoded, the data length of the decoded fifth data is shorter than the data length of the decoded fourth data (Fig. 19, code string provided at input terminal 60 to a code string decomposer 61 to signal component decoder 62 for restoring the signal component, paragraph [0106], page 7, lines 4-8)..

Regarding claim 38, Tsutsui discloses an information processing method according to claim 34, further comprising an encoding step of encoding data, wherein the fourth data includes a variable-length code (Fig. 6, first coding to raise the frequency resolution of a variable length code in the encoding frames, F0, F1, paragraph [0093], page 6, lines 21-24).

As per claim 39, this is a apparatus version of the claimed method discussed above in claim 20 wherein all claimed limitations have also been addressed and/or cited as set forth above.

As per claim 40, this is a program version of the claimed method discussed above in claim 20 wherein all claimed limitations have also been addressed and/or cited as set forth above.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AUBREY H. WYSZYNSKI whose telephone number is (571)272-8155. The examiner can normally be reached on Monday - Thursday, and alternate Friday's.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571)272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aubrey H Wyszynski/
Examiner, Art Unit 2134

/Kambiz Zand/
Supervisory Patent Examiner, Art Unit 2134